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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,260

06/09/2005

Peter Gravesen

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EXAMINER

DAVIS, OCTAVIA L

ART UNIT

PAPER NUMBER

2855

MAIL DATE

DELIVERY MODE

03/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,260	Applicant(s) GRAVESEN ET AL.	
	Examiner OCTAVIA DAVIS	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 7-13 is/are rejected.
- 7) ☒ Claim(s) 3-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 7 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Whitehead et al (5,642,015).

Regarding claims 1 and 11, Whitehead et al disclose elastomeric micro electro mechanical systems comprising a first pressure transfer layer 12, a second pressure transfer layer (not shown), an elastomeric body 5 arranged between the first and second pressure transfer layers (See Fig. 3, See Col. 7, lines 40 – 47), the body having a first surface and a second surface opposed to each other, the first and second surfaces having corrugations or ridges, a first electrode 6 arranged on the first surface and a second electrode 6' arranged on the second surface (See Fig. 6, See Col. 8, lines 50 – 56), the first and the second electrodes being connectable to external means such as 11 (See Col. 5, lines 41 – 43 and 54 – 65) and at least one transfer layer having at least one portion of increased thickness (See Fig. 3, See Col. 7, lines 48 – 51).

Regarding claim 2, the pressure transfer layer 12 has a central portion of increased thickness and on each side of the central portion in the predetermined direction of extension of the body 5, an end portion of decreased thickness (See Fig. 3, See Col. 7, lines 52 – 55) and the pressure transfer layer 4 has a central portion of increased thickness and on each side of the central portion in the predetermined direction of extension of the body 5, an end portion of decreased thickness (See Fig. 6).

Regarding claim 7, the elastomeric body 5 and the pressure transfer layers 12, 12' have similar elastomeric properties (See Col. 4, lines 41 – 42 and Col. 7, line 45).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehead et al (5,642,015).

Regarding claims 8 - 13, Whitehead et al disclose all of the limitations of these claims except sensor elements arranged in a row and column configuration for the determination of local pressure variations over the surface area of the sensor array, wherein the plurality of sensor elements are formed in a common elastomeric body that is a continuous sequence of element bodies. However, in Whitehead et al, the microelectromechanical transducer or device, in which microelectrodes are supported on the elastomeric microstructure, undergoes relative motion in response to electrostatic

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forces and may comprise microreplicated structured elastomeric films on film surfaces to produce a number of microstructures (See Col. 3, lines 44 – 52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a plurality of transducers in a microreplicated configuration to produce multiple microelectromechanical devices that would dramatically reduce the cost of production (See Whitehead et al, Col. 3, lines 52 – 60).

Claim Objections

6. Claims 3 – 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Octavia Davis whose telephone number is 571-272-2176. The examiner can normally be reached on Mon through Thurs from 9 to 5. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OD/2855

2/21/08

/Michael Cygan/

Primary Examiner, Art Unit 2855